

SEQUENCE LISTING

(1) GENERAL INFORMATION:

(i) APPLICANTS: Chatterjee, Deb
Longo, Mary
Flynn, Elizabeth
Oberfelder, Robert

(ii) TITLE OF INVENTION: Methods for Production of Proteins

(iii) NUMBER OF SEQUENCES: 17

(iv) CORRESPONDENCE ADDRESS:

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(C) CITY: Washington
(D) STATE: DC
(E) COUNTRY: USA
(F) ZIP: 20005

(v) COMPUTER READABLE FORM:

(A) MEDIUM TYPE: Floppy disk
(B) COMPUTER: IBM PC compatible
(C) OPERATING SYSTEM: PC-DOS/MS-DOS
(D) SOFTWARE: PatentIn Release #1.0, Version #1.30

(vi) CURRENT APPLICATION DATA:

(A) APPLICATION NUMBER: (To Be Assigned)
(B) FILING DATE: 08-JAN-1998
(C) CLASSIFICATION:

(vii) PRIOR APPLICATION DATA:

(A) APPLICATION NUMBER: US 60/034,658
(B) FILING DATE: 08-JAN-1997
(C) CLASSIFICATION:

(viii) ATTORNEY/AGENT INFORMATION:

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(B) REGISTRATION NUMBER: 32,893
(C) REFERENCE/DOCKET NUMBER: 0942.4200001

(ix) TELECOMMUNICATION INFORMATION:

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(2) INFORMATION FOR SEQ ID NO:1:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 270 base pairs
(B) TYPE: nucleic acid

(C) STRANDEDNESS: both
(D) TOPOLOGY: both

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

5	CTCGGGTACA ACACTGACAA TAAAGAGTAC GTTCTTGTTA AACTTAAGGG TTTTCTTCT	60
	GAAGATAAAG GCGAGTGGAA ACTGAAACTC GATAATGCGG GTAACGGTCA AGCAGTAATT	120
	CGTTTTCTTC CGTCTAAAAA TGATGAACAA GCACCATTCG CAATTCTTGT AAATCACGGT	180
	TTCAAGAAAA ATGGTAAATG GTATATTGAA ACATCATCTA CCCATGATTA CGATTCTCCA	240
	GTACAATACA TCAGTAAAAA TGATCTCGGG	270

10 (2) INFORMATION FOR SEQ ID NO:2:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 263 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: both
15 (D) TOPOLOGY: both

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

	CCATGGGTTT TTCTTCTGAA GATAAAGGCG AGTGGAACT GAAACTCGAT AATGCGGGTA	60
	ACGGTCAAGC AGTAATTCGT TTTCTTCCGT CTAAAAATGA TGAACAAGCA CCATTCGCAA	120
20	TTCTTGTAAT TCACGGTTTC AAGAAAAATG CTAAATGGTA TATTGAAACA TCATCTACCC	180
	ATGATTACGA TTCTCCAGTA CAATACATCA GTAAAAATGA TCTCGGGTAC AACACTGACA	240
	ATAAACACCA CCACCACCAC CAC	263

(2) INFORMATION FOR SEQ ID NO:3:

25 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 22 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: both
(D) TOPOLOGY: both

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

AGGAAATACT TACATATGAG CG

22

(2) INFORMATION FOR SEQ ID NO:4:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 56 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: both
 (D) TOPOLOGY: both

10 (ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:

TATTACTGCA GTTAGTGGTG GTGGTGGTGG TGTTCCACCGT TTTTGAACAG CAGCAG

56

(2) INFORMATION FOR SEQ ID NO:5:

- 15 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 280 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: both
 (D) TOPOLOGY: both

(ii) MOLECULE TYPE: cDNA

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:

CATATGAGCG ATAAAATTAT TCACCTGACT GACGACAGTT TTGACACGGA TGTACTCAAA 60

GCGGACGGGG CGATCCTCGT CGATTTCTGG GCAGAGTGGT GCGGTCCGTG CAAAATGATC 120

GCCCCGATTC TGGATGAAAT CGCTGACGAA TATCAGGGCA AACTGACCGT TGCAAAACTG 180

AACATCGATC AAAACCCTGC TCACTGCGCC GAAATATGGC ATCCGTGGTA TCCCGACTCT 240

25 GCTGCTGTTC AAAAACGGTG AACACCACCA CCACCACCAC 280

(2) INFORMATION FOR SEQ ID NO:6:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 36 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: both
 (D) TOPOLOGY: both

5

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:

TAATAACCAT GGCATATGAG CGATAAAATT ATTCAC

36

(2) INFORMATION FOR SEQ ID NO:7:

- 10 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 36 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: both
 (D) TOPOLOGY: both

15 (ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:

ATTATACCCG AGTCCACCAC GGATGCCATA TTTCGG

36

(2) INFORMATION FOR SEQ ID NO:8:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 280 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: both
 (D) TOPOLOGY: both

(ii) MOLECULE TYPE: cDNA

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:

CCATGCTCAT ATGAGCGATA AAATTATTCA CCTGACTGAC GACAGTTTTG ACACGGATGT 60
ACTCAAAGCG GACGGGGCGA TCCTCGTCGA TTTCTGGGCA GAGTGGTGCG GTCCGTGCAA 120
AATGATCGCC CCGATTCTGG ATGAAATCGC TGACGAATAT CAGGGCAAAC TGACCGTTGC 180

AAAACTGAAC ATCGATCAAA ACCCTGGCAC TGCGCCGAAA TATGGCATCC GTGGTGGACT 240

CGGGTACAAC ACTGACAATA AACACCACCA CCACCACCAC 280

(2) INFORMATION FOR SEQ ID NO:9:

- 5 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 33 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: both
(D) TOPOLOGY: both

(ii) MOLECULE TYPE: cDNA

- 10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:

TAATAACTCG GGAGCGATAA AATTATTCAC CTG 33

(2) INFORMATION FOR SEQ ID NO:10:

- 15 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 33 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: both
(D) TOPOLOGY: both

(ii) MOLECULE TYPE: cDNA

- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:10:

20 ATAATACCCG AGTTTGGTTG CCGCCACTTC ACC 33

(2) INFORMATION FOR SEQ ID NO:11:

- 25 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 282 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: both
(D) TOPOLOGY: both

(ii) MOLECULE TYPE: cDNA

- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:11:

CTCGGGAGCG ATAAAATTAT TCACCTGACT GACGACAGTT TTGACACGGA TGTACTCAAA 60
 GCGGACGGGG CGATCCTCGT CGATTTCTGG GCAGAGTGGT GCGGTCCGTG CAAAATGATC 120
 GCCCCGATTC TGGATGAAAT CGCTGACGAA TATCAGGGCA AACTGACCGT TGCAAAACTG 180
 AACATCGATC AAAACCCTGG CACTGCGCCG AAATATGGCA TCCGTGGTAT CCCGACTCTG 240
 5 CTGCTGTTCA AAAACGGTGA AGTGGCGGCA ACCAAACTCG GG 282

(2) INFORMATION FOR SEQ ID NO:12:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 34 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: both
 (D) TOPOLOGY: both

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:12:

TAATAACTCG GGAAGCTGAC TAATCCGGAA GTAG 34

(2) INFORMATION FOR SEQ ID NO:13:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 33 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: both
 (D) TOPOLOGY: both

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:13:

ATTATTCCCG AGCAGTGCGC GGTATTGATC CAG 33

(2) INFORMATION FOR SEQ ID NO:14:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 138 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: both
 (D) TOPOLOGY: both

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:14:

CTCGGGAAGC TGAATAATCC GGAAGTAGAA CTGCCGAACG CAGAACTGCT AGGCAAACGC 60
CGTCTGGAAA AATTCGCCGC TAAAGTACAG CAGCAGCTGG AAAGCAGCGA TCTGGATCAA 120
TACCGCGCAC TGCTCGGG 138

5 (2) INFORMATION FOR SEQ ID NO:15:

(i) SEQUENCE CHARACTERISTICS:

- 10 (A) LENGTH: 35 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: both
(D) TOPOLOGY: both

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:15:

GATTACTCGG GGCACATAAA ATGCTAAAAG ATACA 35

(2) INFORMATION FOR SEQ ID NO:16:

15 (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 35 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: both
(D) TOPOLOGY: both

20 (ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:16:

TCTAACCCGA GTAAGATCGT TTTTCTTGAA CCACC 35

(2) INFORMATION FOR SEQ ID NO:17:

(i) SEQUENCE CHARACTERISTICS:

- 25 (A) LENGTH: 405 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: both
(D) TOPOLOGY: both

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:17:

	CTCGGGGCAC ATAAAATGCT AAAAGATACA GGCATTATTG CTATCAGCAT TGATGACTAT	60
	GAATTTGCTC ATTTAAAAAT ACTGATGGAT AAAATTTTCG GTGAAGATAA TTTCATCGGA	120
5	AATATCGTCG TTTGTCGTTC AAAAAATGGA AAAGTGAGCA AGCGAAATAT AGCGTCTGCT	180
	CATGAATATT TACTGGTTTA TGGAAAATCA GATATGGCGG AACTATCTGG ACAACCAGAT	240
	GATAAATCTC TTTATGATAA AGTTGATTGT TTTGGTGAAT ATAGAATTGA CGGAATGTTC	300
	AGAAAAAAG GTGATTCAAG TTTGAGAACT GATCGCCCTA ATATGTTTTA TCCTTTATAT	360
	TTTAACCCAT CAACAGGTGA AGTACAGGTA GAGCCAGAAC TCGGG	405